

## (54) METHOD AND APPARATUS FOR MEASURING FLOW RATE OF PULVERIZED COAL

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**PURPOSE:** To exactly measure the flow rate of pulverized coal by adding a measurement reaction accelerator which is made higher in specific dielectric constant than the pulverized coal into the two-phase fluid in the flow passage on the upstream side of a correlation speedometer.

**CONSTITUTION:** A control valve 23 is temporarily opened by a specified amt. to supply the measurement reaction accelerator 18 in a storage body 22 by as much as needed into a flow passage at every measurement of the flow rate of the pulverized coal 12 at the time of measuring the flow rate thereof. The accelerator 18 is then mixed with the two-phase fluid 14 run and fed in the flow passage 15 and is sent at the same speed as the speed of the pulverized coal 12 in a transporting direction F so as to pass the correlation speedometer 17. Since the accelerator 18 has the specific dielectric constant larger than the specific dielectric constant of the pulverized coal 12 at this time, the accelerator 18 is detected as a large change component in electrostatic capacity by electrodes 20a, 20b and 21a, 21b for flow velocity detection of upstream and downstream detectors 20, 21 and the waveforms of the upstream and downstream side electric signals are largely developed. The delay time as the fluctuation signals of these signals is thus easily determined. The flow velocity and concn. of the pulverized coal 12 are, thereupon determined and the flow rate within the sectional area of a piping 11 is determined.

